सत्यमेव जयते

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NOTIFICATION UNDER SECTION 29(2) OF THE ELECTRICITY (SUPPLY) ACT 1948 AS AMENDED

No. B. 18012/1/99-P&E, the 5th May, 2000 : Whereas it is proposed to take up the construction of Bairabi Hydro Electric Project.

And whereas as per section 29(2) of the Electricity (Supply) Act, 1948 the estimate of the Capital Expenditure involved in the Project and salient features thereof and the benefits that may accrue therefrom is required to be published in Official Gazette and local newspapers.

Now, therefore, in compliance of the said section of Electricity (Supply) Act, 1948 the estimate of the capital expenditure, salient features and benefits likely to accrue from the proposed Bairabi Hydro Electric Project are hereby published for information.

Also notice is hereby given inviting licencees and other persons interested who are likely to be affected by it to make representations to the undersigned within a period of 2 (two) months with effect from the date of publication for consideration.

By order

HAUKHUM HAUZEL,
Secretary to the Government of Mizoram,
Power & Electricity Department.

BAIRABI DAM PROJECT
SALIENT FEATURES

1. LOCATION

State	:	Mizoram
District	:	Kolasib
River	:	Tlawng (Dhaleswari)
Damsite Location	:	3.5 Km u/s of Bairabi village
Latitude	:	24° 09' 25" N
Longitude	:	92° 32' 20" E

2. CATEGORY OF THE PROJECT : Hydro-electric project

3. HYDROLOGY

Catchment area	:	2740 Sq. Km.
Maximum observed discharge	:	1438 cumecs
Maximum probable flood	:	10,390 cumecs
Diversion flood	:	3545 cumecs
Average annual run-off	:	3311 Mcm
90% dependable yield	:	2054 Mcm
75% dependable yield	:	2519 Mcm
50% dependable yield	:	3025 Mcm
Mean annual rainfall	:	3135 mm

4. GEOLOGY

Type of rock	:	Thickly bedded to massive, laminated hard and compact grey coloured siltstone mass.
Type of overburden	:	Silty sand and boulders from 12m to 30m depth

5. RESERVOIR

MWL	:	77.72
FRL	:	75m
MDDL	:	55m
Storage at FRL	:	2106 Mcm
Storage at MDDL	:	545 Mcm
Live storage	:	1561 Mcm
Submergence area	:	106 Sq. Km.
New Zero Elevation	:	31.76m

6. DAM

Type of dam	:	Zoned earth
Maximum height over river bed	:	62m
Top of dam	:	El 82m
Free board	:	7m
Crest length of dam	:	182m
Deepest foundation level	:	El 15m
Maximum height of dam	:	67m

7. SPILLWAY

Location	:	Right bank, adjacent to dam
Type	:	Chute spillway
Crest elevation	:	El 60m
Number of bays	:	4
Size of gates	:	15m high * 10m wide
Routed design discharge	:	5730 cum
Energy dissipation	:	Spilling basin type
TWL	:	Length of Spill channel - 110m El 49.33m (Corresponding to routed discharge)

8 DIVERSION ARRANGEMENT

(a) Tunnels

Location	:	Left bank
Number	:	2
Size	:	11m dia.
Length	:	715m and 910m
Inlet level	:	El 26m
Outlet level	:	El 24m
Maximum velocity	:	23 m/s

(b) Upstream Coffer dam

Location	:	proposed to be part of the main dam
Top level	:	El 56m

(c) Downstream Coffer dam

Location	:	350m d/s of dam axis
Top level	:	El 33m

9. POWER

(a) Intake structure

Location	:	Left bank, 250m u/s of the dam axis
Shape	:	D-shaped
Diameter	:	10.4m in plan

(b) HRT

Location	:	Left bank
Number	:	1 (one)
Size	:	11m dia.
Length	:	375m

(c) Pressure tunnel

Number	:	1 (one)
Size	:	9.2m dia.
Length	:	65m

(d) Penstock

Number	:	2 (two)
Size	:	5.6m
Length	:	65m

(e) Power house

Location	:	250m d/s of dam axis on the left bank
Type	:	Semi-surface
Size of power house	:	32.5m * 67m
Type of turbines	:	Kaplan
Design head	:	37m
Design discharge	:	244 cumec

(f) Tail race

Length	:	50m
Size of draft tube gate	:	6.75m * 5m

(g) Switchyai

Location	:	D/s of Power house at El 60m
Size	:	92.5m * 88.3m

(h) Power generation

Installed capacity	:	80 MW
Firm power	:	24 MW
Average annual generation	:	213.55 Gwh
Load factor	:	30%
Cost of generation	:	Rs. 2.64 per Kwh
Sale rate	:	Rs. 3.40 per Kwh

10. ESTIMATED COST : Rs. 42901 lakhs

BENEFITS

1. Continuous power of 24.0 MW will be available for the whole year and full capacity will be available for 12 months. This will solve the present power crisis in the State.

2. The project will provide Navigation, Pisciculture, Socio-economic development, Water shed management, drinking water supply etc.

3. The lake will promote tourism and the same can make an attractive Tourist Centre. Recreation and a host of other allied facilities are the indirect

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